

**WEST** [Generate Collection](#) [Print](#)

L3: Entry 1 of 2

File: JPAB

Jan 31, 1992

PUB-NO: JP404028509A

DOCUMENT-IDENTIFIER: JP 04028509 A

TITLE: MANUFACTURE OF PNEUMATIC TIRE HAVING TREAD HAVING PROJECTION SUCH AS LUG, AND BLOCK IN TREAD

PUBN-DATE: January 31, 1992

## INVENTOR-INFORMATION:

NAME

COUNTRY

ICHIKAWA, TADAO

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

OHTSU TIRE &amp; RUBBER CO LTD :THE

APPL-NO: JP02134500

APPL-DATE: May 24, 1990

INT-CL (IPC): B29C 33/02; B29C 33/42; B29D 30/06

## ABSTRACT:

PURPOSE: To obtain a light-weight pneumatic tire, a gauge of which is equalized approximately, by using a spherical surface in the circumferential direction and the radial direction as a projecting section for molding a section between projections, filling a recessed section with a fluid rubber by the pushing of an inner-surface molding pair and vulcanizing and molding the fluid rubber.

CONSTITUTION: In the manufacture of a pneumatic tire, which is obtained by charging a raw tire 11 into opening-closing-free moldes 1, 5 with tire contour-shaped mold surfaces 4, 8 composed of recessed sections 2, 6 for molding a projection such as a lug, a block, etc., on a tire tread and projecting sections 3, 7 for molding a section between the projections on the tire tread, pushing the raw tire 11 against the mold surfaces 4, 8 by a tire inner-surface molded form 10 and vulcanizing and molding the raw tire, spherical surfaces in the circumferential direction and the radial direction are used as the projecting sections 3, 7 for molding the section between the projections, and the recessed sections 2, 6 are filled with a fluid rubber by pushing the inner-surface molded form 10 and the fluid rubber is vulcanized and molded.

COPYRIGHT: (C)1992,JPO&amp;Japio

**WEST****End of Result Set** [Generate Collection](#) [Print](#)

L3: Entry 2 of 2

File: DWPI

Jan 31, 1992

DERWENT-ACC-NO: 1992-085225

DERWENT-WEEK: 199211

COPYRIGHT 2002 DERWENT INFORMATION LTD

TITLE: Pneumatic tyre mfr. having protrusion e.g. block, lug ontread - uses mould with surfaces having recesses for moulding protrusions on tread, and protrusion parts for moulding parts between protrusions

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
OHTSU TIRE CO LTD	OHTS

PRIORITY-DATA: 1990JP-0134500 (May 24, 1990)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 04028509 A</u>	January 31, 1992		003	

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP04028509A	May 24, 1990	1990JP-0134500	

INT-CL (IPC): B29C 33/02; B29D 30/06; B29K 21/00; B29K 105/24; B29L 30/00

ABSTRACTED-PUB-NO: JP04028509A

## BASIC-ABSTRACT:

Openable mould has mould surfaces in the outer shape of a tyre comprising recessed parts for moulding protrusions, e.g. lugs, blocks, formed on a tyre tread; and protrusion parts for moulding a part between the protrusions. A live tyre is charged in the mould and the tyre is pressed against the mould surfaces by using a tyre inner surface moulding body to vulcanisation-mould a pneumatic tyre.

A circumferential and radial spherical surface is used as the protrusions 3 for moulding a part between protrusions. The recessed parts are filled with fluid rubber by pressure effected by the inner surface moulding body to effect vulcanisation moulding.

USE/ADVANTAGE- A base gauge between lugs or blocks is uniform over the whole tyre. Tyre is light and ensures enough traction force and reduces adhesion of mud.

CHOSEN-DRAWING: Dwg.0/4

TITLE-TERMS: PNEUMATIC TYRE MANUFACTURE PROTRUDE BLOCK LUG MOULD SURFACE RECESS MOULD PROTRUDE TREAD PROTRUDE PART MOULD PART PROTRUDE

DERWENT-CLASS: A35 A95

CPI-CODES: A11-B; A11-C02A1; A12-T01;

## POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0009 0223 0229 2020 2198 2348 2362 2470 2493 2545 2646 2658 2826 3253 3258

WEST

 Generate Collection 

L5: Entry 1 of 2

File: JPAB

Jan 9, 1986

PUBN-NO: JP361003711A

DOCUMENT-IDENTIFIER: JP 61003711 A

TITLE: VULCANIZATION MOLDING METHOD OF PNEUMATIC TIRE

PUBN-DATE: January 9, 1986

## INVENTOR-INFORMATION:

NAME

COUNTRY

TAMURA, AKIRA

INOUE, OSAMU

SAKAGUCHI, HIDETOSHI

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

BRIDGESTONE CORP

APPL-NO: JP59123921

APPL-DATE: June 18, 1984

US-CL-CURRENT: 220/565; 264/326

INT-CL (IPC): B29C 33/04; B29C 33/30; B29C 35/04; B29D 30/00

## ABSTRACT:

PURPOSE: To obtain advantageously and conveniently different kinds of pattern treads based on the same mold through selection of respective connecting positions, by deciding the one or more connecting positions separated from each other and placed at intervals by running along the external circumference of a tire which is going to be manufactured.

CONSTITUTION: As for a mold of the titled method, it is constituted with a set of cavity half parts U, L forming a molding cavity C within an inner cave through a connection at the surface S' by making the central circumferential surface P of a normal tire into the parting surface S and a bead die annulus M and a bladder B conforming to the respective inner circumferences, and a deep hollow R for formation of a lug is notched on the inside F of the mold forming the bottom of a lateral groove. A projection of the inside F of the mold at a regular connecting position is shown by (a) and a similar one at a second connecting position to be placed at intervals by running along the external circumference of a tire, which is going to be manufactured, from the connecting position is shown by (b). With this construction, at the time of the connection at the parting surface of the one set of the molds without necessitating a newly-made mold, vulcanization molding to a different odd-shaped pattern can be performed easily between the parting surface and a basic shape through only selection of the more than one connecting positions isolating from each other.

COPYRIGHT: (C)1986,JPO&amp;Japio

Multipunch Codes: 014 03- 032 231 359 371 377 380 41& 45& 456 473 476 50& 55& 575 581  
597 599 600 651 672 022 022 202 219 234 236 247 249 254 264 265 282 325 325

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1992-039194

## WEST

 Generate Collection 

L1: Entry 1 of 2

File: JPAB

Jun 27, 1989

PUB-NO: JP401163051A  
DOCUMENT-IDENTIFIER: JP\_01163051 A  
TITLE: GROOVING APPARATUS

PUBN-DATE: June 27, 1989

## INVENTOR-INFORMATION:

NAME	COUNTRY
KINUHATA, HIROSHI	
TAKAMI, MASAO	
SHIBATA, EIJI	
TAMURA, TADAHIKO	

## ASSIGNEE-INFORMATION:

NAME	COUNTRY
SUMITOMO RUBBER IND LTD	
YASUKAWA SETSUBI GIKEN KK	

APPL-NO: JP62322204

APPL-DATE: December 19, 1987

US-CL-CURRENT: 157/13  
INT-CL (IPC) : B29D 30/68

## ABSTRACT:

PURPOSE: To process a pattern groove having required inclination and to dispense with a rotary shaft for inclining a cutter support apparatus, by mounting a cutter to the cutter holder of the cutter support apparatus arranged in the direction right angled to a tire support shaft so as to incline the same at an arbitrary angle of inclination.

CONSTITUTION: A cutter support frame 13 is fixed to a support rod 12 and the leg part of a cutter 10 is inserted in a pair of the cutter clamps 20 in the cutter holder 17 held to the engaging groove 16 of the cutter support frame 13 to be fixed in a state grasped between the cutter and the clamps. When a pattern groove is processed, a front-shape cutter 10 is symmetric with respect to the center axis (l) of the cutter holder 17 and mounted vertically with respect to a tire support shaft and cut in the tire vertically to process the pattern groove 24a. When a pattern groove 24b is processed at a position where a groove center line (n) has an angle  $\theta$  of inclination, the cutter 10 is mounted so that the center line (n) thereof is inclined by  $\theta$  with respect to the center axis (l) of the cutter holder. In the processing of the pattern groove 24c present at the position symmetric to the pattern groove 24b, the direction of the cutter 10 is made opposite to that at the time of the processing of the pattern groove 24b.

COPYRIGHT: (C)1989,JPO&amp;Japio

**WEST****End of Result Set** [Generate Collection](#) [Print](#)

L1: Entry 2 of 2

File: DWPI

Jun 27, 1989

DERWENT-ACC-NO: 1989-225608

DERWENT-WEEK: 198931

COPYRIGHT 2002 DERWENT INFORMATION LTD

**TITLE:** Grooving device - comprising rotatable tyre support shaft, cutter support device, traversing shaft and orthogonal shaft

**PATENT-ASSIGNEE:**

ASSIGNEE	CODE
SUMITOMO RUBBER IND LTD	SUMR
YASUKAWA SETSUBI GIKEN K	YASUN

**PRIORITY-DATA:** 1987JP-0322204 (December 19, 1987)**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>JP 01163051 A</u>	June 27, 1989		005	
JP 92068137 B	October 30, 1992		005	B29D030/68

**APPLICATION-DATA:**

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP01163051A	December 19, 1987	1987JP-0322204	
JP92068137B	December 19, 1987	1987JP-0322204	
JP92068137B		JP 1163051	Based on

**INT-CL (IPC) :** B29D 30/68**ABSTRACTED-PUB-NO:** JP01163051A**BASIC-ABSTRACT:**

The grooving device comprises a tyre support shaft, rotatably supporting a tyre; a cutter support device, having a cutter holder to which a cutter is mounted; a traversing shaft, relatively moving the cutter support device in parallel to the tyre support shaft; and on orthogonal shaft, moved at right angles with the traversing shaft.

The cutter support device is rotatably supported extending at right angles with the tyre support shaft. A cutter inclined based on the central line of a pattern groove is removably held to the cutter support device according to an inclination angle between the vertical line of a tread centre and the central line of a pattern groove.

**USE/ADVANTAGE** - Can machine a pattern groove, having different inclination angles, without rotating a support arm and eliminates a shaft for rotating the support arm of a cutter support device and a drive device for the shaft, resulting in simplification of whole device.

**TITLE-TERMS:** GROOVE DEVICE COMPRIZE ROTATING TYRE SUPPORT SHAFT CUT SUPPORT DEVICE  
TRAVERSE SHAFT ORTHOGONAL SHAFT

**DERWENT-CLASS:** A35 A95

WEST

 [Generate Collection](#) [Print](#)

L5: Entry 1 of 2

File: JPAB

Jan 9, 1986

PUB-NO: JP361003711A

DOCUMENT-IDENTIFIER: JP 61003711 A

TITLE: VULCANIZATION MOLDING METHOD OF PNEUMATIC TIRE

PUBN-DATE: January 9, 1986

## INVENTOR-INFORMATION:

NAME

COUNTRY

TAMURA, AKIRA

INOUE, OSAMU

SAKAGUCHI, HIDETOSHI

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

BRIDGESTONE CORP

APPL-NO: JP59123921

APPL-DATE: June 18, 1984

US-CL-CURRENT: 220/565; 264/326

INT-CL (IPC): B29C 33/04; B29C 33/30; B29C 35/04; B29D 30/00

## ABSTRACT:

PURPOSE: To obtain advantageously and conveniently different kinds of pattern treads based on the same mold through selection of respective connecting positions, by deciding the one or more connecting positions separated from each other and placed at intervals by running along the external circumference of a tire which is going to be manufactured.

CONSTITUTION: As for a mold of the titled method, it is constituted with a set of cavity half parts U, L forming a molding cavity C within an inner cave through a connection at the surface S by making the central circumferential surface P of a normal tire into the parting surface S and a bead die annulus M and a bladder B conforming to the respective inner circumferences, and a deep hollow R for formation of a lug is notched on the inside F of the mold forming the bottom of a lateral groove. A projection of the inside F of the mold at a regular connecting position is shown by (a) and a similar one at a second connecting position to be placed at intervals by running along the external circumference of a tire, which is going to be manufactured, from the connecting position is shown by (b). With this construction, at the time of the connection at the parting surface of the one set of the molds without necessitating a newly-made mold, vulcanization molding to a different odd-shaped pattern can be performed easily between the parting surface and a basic shape through only selection of the more than one connecting positions isolating from each other.

COPYRIGHT: (C)1986,JPO&amp;Japio

CPI-CODES: A11-A05B; A12-T01;

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0009 0223 0229 2372 2458 2470 2545 2826

Multipunch Codes: 014 03- 032 371 388 41& 45& 455 456 476 672 726

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1989-100411